Title (en)

TEST MATRIX GENERATING METHOD, ENCODING METHOD, DECODING METHOD, COMMUNICATION APPARATUS, COMMUNICATION SYSTEM, ENCODER AND DECODER

Title (de)

TESTMATRIX-ERZEUGUNGSVERFAHREN, CODIERUNGSVERFAHREN, DECODIERUNGSVERFAHREN, KOMMUNIKATIONSVORRICHTUNG, KOMMUNIKATIONSSYSTEM, CODIERER UND DECODIERER

Title (fr)

PROCEDE DE GENERATION DE MATRICE DE TEST, PROCEDE DE CODAGE, PROCEDE DE DECODAGE, APPAREIL DE COMMUNICATION, SYSTEME DE COMMUNICATION, CODEUR ET DECODEUR

Publication

EP 1924001 A1 20080521 (EN)

Application

EP 06782017 A 20060731

Priority

- JP 2006315139 W 20060731
- JP 2005232665 A 20050810

Abstract (en)

A processing of preparing a regular quasi-cyclic matrix in which cyclic permutation matrices are arranged in row and column directions and specific regularity is given to the cyclic permutation matrices, deriving conditional expressions for assuring a predetermined minimum loop in the parity check matrix to be finally generated, and generating a mask matrix for converting a specific cyclic permutation matrix into a zero-matrix based on the conditional expressions and a predetermined weight distribution, a processing of converting the specific cyclic permutation matrix in the regular quasi-cyclic matrix into the zero-matrix using the mask matrix to generate an irregular masking quasi-cyclic matrix, and a processing of generating an irregular parity check matrix with an LDGM structure in which the masking quasi-cyclic matrix, and a matrix in which the cyclic permutation matrices are arranged in a staircase manner are arranged in a predetermined location are performed.

IPC 8 full level

H03M 13/19 (2006.01); **G06F 11/10** (2006.01)

CPC (source: EP KR US)

H03M 13/11 (2013.01 - KR); **H03M 13/1117** (2013.01 - EP US); **H03M 13/1122** (2013.01 - EP US); **H03M 13/1137** (2013.01 - EP US); **H03M 13/116** (2013.01 - EP US); **H03M 13/6362** (2013.01 - EP US); **H04L 1/00** (2013.01 - KR); H04L 1/0057 (2013.01 - EP US)

Cited by

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DOCDB simple family (publication)

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